

# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/693,387	10/24/2003	D. Travis Lay	200208954-1	1634
22879	7590 03/16/2006		EXAMINER	
HEWLETT PACKARD COMPANY			WILLIAMS, DON J	
	/2400, 3404 E. HARMON ΓUAL PROPERTY ADM		ART UNIT	PAPER NUMBER
	LINS, CO 80527-2400		2878	

DATE MAILED: 03/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

			H'.
	Application No.	Applicant(s)	
	10/693,387	LAY ET AL.	
Office Action Summary	Examiner	Art Unit	
	Don Williams	2878	
The MAILING DATE of this communication Period for Reply	appears on the cover sheet wi	th the correspondence address	
A SHORTENED STATUTORY PERIOD FOR REWHICHEVER IS LONGER, FROM THE MAILING  - Extensions of time may be available under the provisions of 37 CF after SIX (6) MONTHS from the mailing date of this communication  - If NO period for reply is specified above, the maximum statutory pe  - Failure to reply within the set or extended period for reply will, by st Any reply received by the Office later than three months after the mearned patent term adjustment. See 37 CFR 1.704(b).	B DATE OF THIS COMMUNIC R 1.136(a). In no event, however, may a re riod will apply and will expire SIX (6) MON tatute, cause the application to become AB	CATION.  Sply be timely filed  IHS from the mailing date of this communication.  ANDONED (35 U.S.C. § 133).	
Status			
1) Responsive to communication(s) filed on 0	<u>6 January 2006</u> .		
2a) ☐ This action is <b>FINAL</b> . 2b) ☑ <sup>-</sup>	This action is non-final.		
3) Since this application is in condition for allo	•	·	
closed in accordance with the practice und	er <i>Ex parte Quayle</i> , 1935 C.D	. 11, 453 O.G. 213.	
Disposition of Claims			
4) ⊠ Claim(s) <u>1-20</u> is/are pending in the applicate 4a) Of the above claim(s) is/are with 5) ⊠ Claim(s) <u>16-20</u> is/are allowed.  6) ⊠ Claim(s) <u>1-15</u> is/are rejected.  7) □ Claim(s) is/are objected to.  8) □ Claim(s) are subject to restriction are	drawn from consideration.		
Application Papers			
9) ☐ The specification is objected to by the Exam  10) ☑ The drawing(s) filed on 24 October 2003 is/  Applicant may not request that any objection to Replacement drawing sheet(s) including the cor  11) ☐ The oath or declaration is objected to by the	are: a)⊠ accepted or b)⊡ ol the drawing(s) be held in abeyan rection is required if the drawing(	ce. See 37 CFR 1.85(a). s) is objected to. See 37 CFR 1.121(d)	
Priority under 35 U.S.C. § 119			
12) Acknowledgment is made of a claim for fore a) All b) Some * c) None of:  1. Certified copies of the priority document	nents have been received. Idents have been received in Appriority documents have been reau (PCT Rule 17.2(a)).	oplication No received in this National Stage	
Attachment(s)  1)   Notice of References Cited (PTO-892)	4) 🖂 Intonious S	ummary (PTO-413)	
<ul> <li>Notice of References Cited (P10-892)</li> <li>Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>Information Disclosure Statement(s) (PTO-1449 or PTO/SB Paper No(s)/Mail Date</li> </ul>	Paper No(s	)/Mail Date formal Patent Application (PTO-152)	

Art Unit: 2878

### **DETAILED ACTION**

The Affidavits corresponding to Exhibit A filed on September 19, 2002 and Exhibit B filed on February 22, 2002 under 37 CFR 1.131 are sufficient to overcome Ohba et al (4,483,124) in view of Kretschmann et al (6,836,672) reference. The rejection has been withdrawn. Upon further consideration, a new ground(s) of rejection is made.

## Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 2, 4-9,11-13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohba et al in view of Blackman et al (6,167,231).

As to claim 1, Ohba et al disclose a sheet-like material processing apparatus that is functionally equivalent to the media routing control device. Ohba et al disclose sensors (211, 212) for detecting features of the transfer sheet (P), which are compatible to characteristics of a media sheet; a usable sheet media path or normal sheet transfer path (303 or 303a), an unusable sheet media path or soiled sheet transfer path (303b); a controller (900) electrically coupled to the sensors (315, 313), (see fig. 1B, column 10, lines 34-60, fig. 24, column 28, lines 30-68). Ohba et al is silent as to the inclusion of a sheet–inverting duplexing path. Ohba et al and Blackman et al are of the same field of

endeavors. Blackman et al disclose a module duplex media handling system (22) having a sheet-inverting path for flipping the media sheet. It would have been obvious for one ordinary skill in the art to modify Ohba et al to include a media handling system (22) having the capability of inverting or flipping the media sheet (M) on its opposite side corresponding to the detected features or characteristics of the media surfaces as disclosed by Blackman et al in order to facilitate doubled sided copying to reduce the cost of paper used in copying.

Page 3

As to claim 2, the modified Ohba et al disclose a media routing control device with an input/output device (904) electrically coupled to the controller (900), the input/output device (904) configured to provide one previous use parameter to the controller (900), (see fig. 24, column 28, lines 30-68).

As to claim 4, the modified Ohba et al disclose a media routing control device with input trays (105,106), (see fig. 1B, column 4, lines 56-67, column 6, lines 1-65).

As to claim 5, the modified Ohba et al disclose a media routing control device detachably attach to a sheet-fed device (102), (see fig. 1B, column 5, lines 50-54, column 6, lines 46-48).

As to claim 6, the modified Ohba et al disclose a media routing control device with usable media path (303 or 303a) with properly oriented media sheet (P) to the sheet fed device (102), (see fig. 1B, column 6, lines 46-50).

As to claim 7, Ohba et al disclose a sheet fed device (102) with input trays (105, 106), media sheets (P), media paths and imaging path (301, 302, 303), an unusable media path (303b), media sensing circuitry (223) for receiving one media sheet (P), (see Art Unit: 2878

column 9, lines 10-68, column 10, lines 1-67). Ohba et al is silent as to the inclusion of a sheet–inverting duplexing path. Ohba et al and Blackman et al are of the same field of endeavors. Blackman et al disclose a media handling system (22) having a sheet inverting path for flipping the media sheet. It would have been obvious for one ordinary skill in the art to modify Ohba et al to include a module duplex media handling system (22) having the capability of inverting or flipping the media sheet (M) on its opposite side corresponding to the detected features or characteristics of the media surfaces as disclosed by Blackman et al in order to facilitate doubled sided copying to reduce the cost of paper used in copying, (see fig. 2, column 4, 34-40).

As to claim 8, the modified Ohba et al disclose a sheet fed device (102) with a media sensing circuitry (223) configured to detect one side of the media sheet (P) and location of the print impairing characteristics of a previous printing to determine a usable side of the media sheet, (see fig. 1, column 9, lines 10-67).

As to claim 9, the modified Ohba et al disclose a sensing circuitry (223) and media sheet (P), (see column 9, lines 10-67). Ohba et al is silent as to the inclusion of a direct inversion of the one media sheet to an opposite side to determine a usable side when detected. Blackman et al disclose a media handling system (22) having a sheet inverting path for flipping the media sheet. It would have been obvious for one ordinary skill in the art to modify Ohba et al to include a module duplex media handling system (22) having the capability of inverting or flipping the media sheet (M) on its opposite side corresponding to the detected features or characteristics of the media surfaces as

disclosed by Blackman et al in order to facilitate doubled sided copying to reduce the cost of paper used in copying, (see fig. 2, column 4, 34-40).

As to claim 11, Ohba et al dislose selecting a media (P) from input trays (105 106); transporting the media sheet (P) past sensing circuitry (201) configured with sensor elements (211, 212); collecting data from the sensing circuitry (201); analyzing the data according to print-impairing characteristics; routing the media sheet (P) to a usable media paths (303, 303a) when the data from either side of the media sheet (P) qualifies the media sheet (P) for use by the sheet fed device (102), (see fig. 1b, column 9, lines 10-67, column 10, lines 1-67). Ohba et al and Blackman et al are of the same field of endeavors. Blackman et al disclose a media handling system (22) having a sheet inverting path for flipping the media sheet. It would have been obvious for one ordinary skill in the art to modify Ohba et al to include a module duplex media handling system (22) having the capability of inverting or flipping the media sheet (M) on its opposite side corresponding to the detected features or characteristics of the media surfaces as disclosed by Blackman et al in order to facilitate doubled sided copying to reduce the cost of paper used in copying, (see fig. 2, column 4, 34-40).

As to claim 12, Ohba et al disclose routing the media sheet (P) to an unusable media path (303b) when data from both sides of the media sheet (P) fails to qualify the media sheet (P) for use by the sheet fed device (102), (see fig. 1B, column 5, lines 51-55, column 10, lines 34-67).

Application/Control Number: 10/693,387

Art Unit: 2878

As to claim 13, Ohba et al disclose media sensor circuitry (223a) analyzes the data to determine the routing path of the print media (P), (column 9, lines 10-67, column 10, lines 34-67).

As to claim 15, the modified Ohba et al disclose performing imaging process on the media sheet (P).

Claims 3,10, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohba et al in view of Blackman et al and further in view of Chapman et al (4,710,963).

As to claim 3, the modified Ohba et al in view of Blackman et al disclose a media routing device with a controller (900), sheet (P), and sheet inverting duplexing path to invert the sheet. Ohba et al, Blackman et al and Chapman et al are of the same field of endeavors. Ohba et al in view of Blackman et al are silent according to the parameter being a threshold characteristics of the sheet. Chapman et al teach a first threshold that corresponds to the brightness of the printed area. It would have been obvious for one ordinary skill in the art to modify Ohba et al in view of Blackman et al to monitor and compare the brightness of the printed area of the media to improve the detection of the threshold signals or characteristics corresponding to the top and bottom face of the document as disclosed by Chapman et al in order to determine whether the document should be rejected or accepted, (see column 1, lines 5-68).

As to claim 10, the modified Ohba et al in view of Blackman et al disclose sheetfeed device (102), having an input/output device (904) electrically coupled to media Art Unit: 2878

sensing circuitry (223a). Ohba et al in view of Blackman et al are silent as to the device defining a threshold of the print-imparting characteristics. Chapman et al disclose first and second threshold signals corresponding to the brightness of the media sheet. It would have been obvious for one ordinary skill in the art to modify Ohba et al in view of Blackman et al to monitor and compare the threshold signals corresponding to the document as disclose by Chapman et al in order to determine whether the non-preprinted or pre-preprinted document should be rejected or accepted, (see column 1, lines 5-68).

As to claim 14, Ohba et al in view of Blackman et al teach comparing analyzed data, (see column 9, lines 34-67). Ohba et al in view of Blackman et al are silent as to the analyzed data including threshold signals. Chapman et al disclose analyzed data that includes threshold comparisons. It would have been obvious for one ordinary skill in the art to modify Ohba et al in view of Blackman et al to monitor and compare the brightness of the printed area of the media to improve the detection of the threshold signals or characteristics of the document as disclosed by Chapman et al to determine whether the document should be rejected or accepted, (see column 1, lines 5-68).

## Allowable Subject Matter

Claims 16-20 allowed.

The following is a statement of reasons for the indication of allowable subject matter:

Application/Control Number: 10/693,387 Page 8

Art Unit: 2878

The prior art fails to teach, either singly of in combination the first presence and second presence is less than an unusable threshold and the first presence and second presence exceeds the unusable threshold.

#### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Don Williams whose telephone number is 571-272-8538. The examiner can normally be reached on 8:30a.m. to 5:30a.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Epps can be reached on 571-272-2328. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/693,387

Art Unit: 2878

Georgia Epps
Supervisory Patent Examiner
Technology Center 2800

Page 9